March 23, 1937. E. C. GREEN 2,074,390

APIARIST'S GLOVE AND GARMENT

Filed Aug. 12, 1936

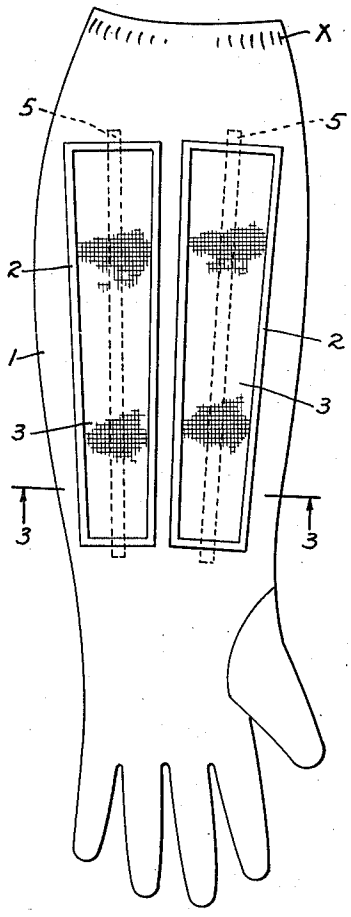



Fig. 1.

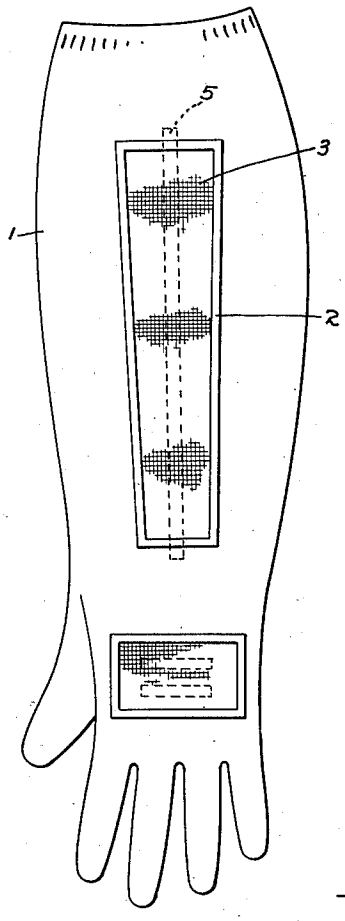



Fig. 2.

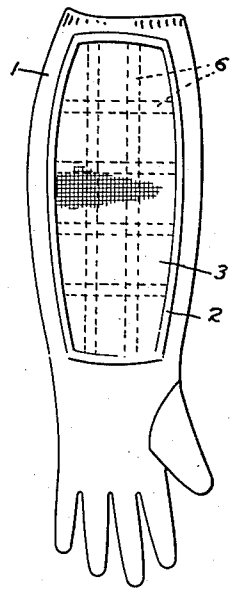



Fig. 4.

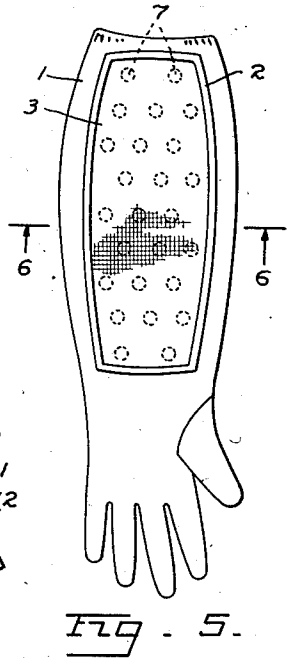



Fig. 5.

Fig. 3.

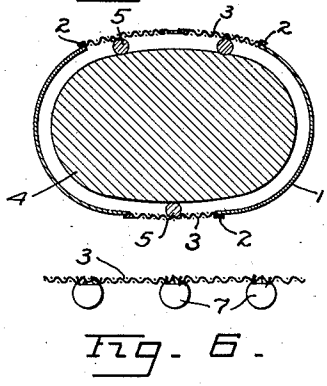



Fig. 6.

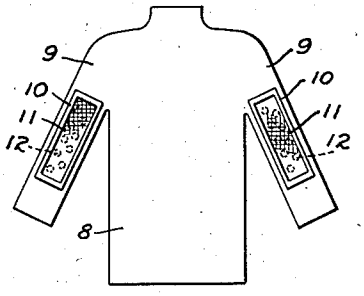



Fig. 7.

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Patented Mar. 23, 1937 2,074,390

# UNITED STATES PATENT OFFICE

2,074,390

## APIARIST'S GLOVE AND GARMENT

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Application August 12, 1936, Serial No. 95,582

7 Claims. (Cl. 2—161)

This invention relates to beekeepers generally and in particular to the long gloves as worn by beekeepers to permit them to handle the hives yet protect their hands and arms from the stings of the bees.

The principal object of the invention is to provide gloves for beekeepers which will effectively perform the function above set out but which will at the same time be much lighter and cooler than the special type of gloves heretofore in use for this purpose. Other objects and advantages of the invention will appear in the following description and accompanying drawing.

In the drawing, Fig. 1 is a front plan view of a long sleeve or gauntlet type of beekeeper's glove made in accordance with my invention.

Fig. 2 is a view of the rear side of the glove of Fig. 1.

Fig. 3 is a cross section of the glove of Fig. 1 taken along the line 3—3 thereof.

Fig. 4 shows a modified form of the special construction of my glove.

Fig. 5 is a view like that of Fig. 1 showing another modification of the invention.

Fig. 6 is an enlarged cross section of the glove of Fig. 5 taken along the line 6—6 thereof.

Fig. 7 shows the application of the invention to the sleeves of a beekeeper's shirt, which permits the use therewith of short leather or sting-proof gloves.

Before describing the invention in detail it may be said that beekeepers when working among the hives, extracting the honey etc. must necessarily make provision against being stung by the insects, and to this end it is customary to put on enough clothes to form a thick enough pad over the body to prevent the stingers of the bees from penetrating to the flesh, cover the head with hat and mask, heavy leggins on the legs and long gauntlet type of gloves made of thick material impenetrable to the stingers of the bees. All of this apparel worn by a beekeeper on an extremely hot day is, it is needless to say, almost unbearable, especially for any length of time.

My invention overcomes the intolerable heat and discomfort of apiarists in hot weather by providing at any desired point in their garments, especially the gauntlets of the gloves, large openings covered by a fine flexible wire or textile mesh with openings fine enough to prevent a bee projecting his body through, and the mesh spaced away from the flesh of the wearer by spacers made of tufts, ropes, or other devices positioned at points about the area of the mesh and bearing preferably directly on the flesh. The spacers being high enough and at close enough intervals to absolutely preclude the stingers of the bees reaching the flesh even though projected through the openings of the mesh.

In Figs. 1 to 5 the application of my invention to a beekeeper's gauntlet glove is shown, the glove being designated 1 and usually is provided with elastic X at the open end to fit tight against the ingress of bees. In all of the figures the various openings for the purpose of my invention, are cut through the walls of the gloves (or left open during the manufacture) and are designated 2, the fine flexible mesh covering the openings designated 3 is secured by sewing or any suitable means to the edges of the opening and spaced from the flesh 4 of the wearer by various means such as in Figs. 1 to 3, pieces of small flexible rope 5 are sewed in position and/or to the under side of the mesh fabric to extend across or part way across the open panels, while in Fig. 4 the ropes 6 are arranged to cross one another or cut in pieces to form rectangles or other shapes.

In Figs. 5 and 6, the spacers take the form of tufts of button-like members 7 either of cloth, felt, rubber or actual buttons, sewed at relatively close intervals to the under side of the mesh fabric, as more clearly indicated in Fig. 6. Such a lot of closely arranged small spacers make the apparel more flexible and provide for easier circulation of air.

If desired the spacers may be continued even on the main walls of the glove and thus permit free circulation of air throughout. It is also manifest without further drawing that in this latter case the entire glove, or at least all but the fingers and the palms of the glove's hand could all be of the fine mesh as the great number of spacers would effectually hold it beyond stinger length from the flesh.

In Fig. 7 one application of the invention to a beekeeper's shirt 8 is shown in which the arms 9 are provided with openings 10 covered with fine flexible mesh 11 and studded with spacers 12 as described for Fig. 6, though it is evident the spacers in this case may be ropes as shown in Figs. 1 and 2.

It is evident from the above that the same idea may be applied to leggins and other articles or beekeeper's apparel, though the gloves are the most important as they are the present cause of the greatest discomfort and also exposed to the most violent attack of the bees. It is also evident that with the construction provided by this invention, hornets and other dangerous insects will

be rendered harmless to persons obliged to work among them.

Having thus described my invention what I claim is:

1. A glove for apiarists having a body wall of sting-proof material with an opening formed therethrough, said opening covered with a layer of flexible screen material, the mesh of which is too fine to permit substantial entry of a bee, and spacing means provided within the glove arranged to hold the screen material spaced from the flesh of a wearer beyond the length of the stingers of the bees.

2. A glove for apiarists having a body wall of sting-proof material with an opening formed therethrough, said opening covered with a layer of flexible screen material the mesh of which is too fine to permit substantial entry of a bee, and spacing means provided within the glove and secured to the screen arranged to hold the screen material spaced from the flesh of a wearer beyond the length of the stingers of the bees.

3. A glove for apiarists having a body wall of sting-proof material with an opening formed therethrough, said opening covered with a layer of flexible screen material, the mesh of which is too fine to permit substantial entry of a bee, and a plurality of spacing means provided within the glove and secured at isolated points to the screen arranged to hold the screen material spaced from the flesh of a wearer beyond the length of the stingers of the bees.

4. In a glove as specified in claim 1, said opening taking the form of a panel on both front and back of the glove.

5. A glove for apiarists having a body wall of sting-proof material with an opening formed therethrough, said opening covered with a layer of flexible screen material, the mesh of which is too fine to permit substantial entry of a bee, and sections of rope provided within the glove arranged to hold the screen material spaced from the flesh of a wearer beyond the length of the stingers of the bees.

6. An article of wearing apparel for workers among venomous insects which comprises a flexible body fitting garment having a limited substantial area made of fine flexible ventilating screen material of a mesh to exclude the insects and provided with spacing devices positioned within the garment spacing the screen from the flesh of the wearer a distance beyond the reach of the insects' stingers and said body fitting garment forming a continuation of said screen material and closing the same at all margins against the ingress of such insects under said screen material.

7. An article of wearing apparel for workers among venomous insects which comprises a flexible body-fitting garment having a substantial area made of fine flexible ventilating screen material of a mesh to exclude the insects and provided with spacing devices positioned within the garment at intervals throughout said area spacing the screen from the flesh of the wearer throughout said area a distance beyond the reach of the insects' stingers so as to be effective over bended joints in the body covered thereby.

ELISHA COLE GREEN.